

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for sealing a fibre-based material to a counter-surface to be bonded to the material by melting polymer present at a seal point, comprising:
directing a laser beam through a fibre layer of the material to a radiation-absorbing pigment disposed in a sealing area, so that polymer present at the seal point is absorptive-heat-melted and the fibre-based material is sealed to the counter-surface of the material, wherein
a laser source of the laser beam is a diode or Nd:YAG laser; and
the laser beam has a wavelength of not greater than 1500 nm.
2. (Previously presented) A method as defined in claim 1, wherein the fibre-based material is a polymer-coated paper or board having a polymer coating thereon, and
the polymer-coated paper or board is sealed to said counter-surface placed adjacent to said polymer coating.
3. (Withdrawn) A method as defined in claim 1 or 2, wherein the fibre-based material is sealed to a counter-surface containing polymer placed adjacent the material, such as a polymer film.
4. (Previously presented) A method as defined in claim 1, wherein the pigment is included in the fibre-based material to be sealed.
5. (Withdrawn) A method as defined in claim 1, wherein the pigment is included in a member forming the counter-surface, to which the fibre-based material is to be sealed.

6. (Withdrawn) A method as defined in claim 1, wherein the pigment is located on the surface of the fibre layer.

7. (Withdrawn) A method as defined in claim 6, wherein the pigment is located under said polymer coating of a paper or board.

8. (Previously presented) A method as defined in claim 1, wherein the pigment is dispersed in a polymer layer of a coating or a film disposed on said fibre-based material.

9. (Withdrawn) A method as defined in claim 8, wherein the pigment is included in the uppermost layer of a multi-layer polymer coating or film disposed on said fibre-based material.

10. (Withdrawn) A method as defined in claim 8, wherein the pigment is included in an inner layer of a multi-layer polymer coating or film disposed on said fibre-based material.

11. (Previously presented) A method as defined in claim 1, wherein the pigment contains carbon black.

12. (Previously presented) A method as defined in claim 1, wherein the fibre-based material is a polymer-coated paper or board is sealed to an adjacent polymer layer.

13. (Previously presented) A method as defined in claim 12, wherein the polymer-coated paper or board is sealed against itself.

14. (Previously presented) A method as defined in claim 13, wherein the method is used for lateral sealing or closing of casing, container or bag packages made of polymer-coated paper or board.

15. (Cancelled)

16. (Previously presented) A method as defined in claim 1, wherein the laser source of the laser beam is a diode.

17. (Currently amended) A method as defined in claim 1, wherein the laser source of the laser beam is a Nd:YAG laser.

18. (Currently amended) A method as defined in claim 2, wherein the laser source of the laser beam is a Nd:YAG laser.

19. (Currently amended) A method as defined in claim 4, wherein the laser source of the laser beam is a Nd:YAG laser.

20. (New) A method as defined in claim 1, wherein the laser beam has a wavelength of 500-1500 nm.